

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - NSPS SOURCE

PERMITTEE

Seneca Petroleum Company, Inc.  
Attn: Nick Amato  
13301 South Cicero Avenue  
Crestwood, Illinois 60445

Application No.: 02120011

I. D. No.: 197803AAB

Applicant's Designation:

Date Received: December 3, 2002

Subject: Asphalt Bulk Storage and Blending Facility

Date Issued: January 31, 2005

Expiration Date: January 31, 2010

Location: 12460 South New Avenue, Lemont

Permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of forty-nine asphalt storage and blending tanks, nine asphalt additives storage tanks, one hydrogen chloride storage tank, eleven truck loading stations and four asphalt heaters pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the combined emissions of volatile organic material (VOM) and hazardous air pollutants (HAP) from the Seneca Petroleum Company and Korall Corporation (I.D. 197803ABD) which constitutes a support facility for the Seneca Petroleum Company to less than major source thresholds (i.e., 25 tons/year for VOM, 10 tons/year for a single HAP and 25 tons/year for totaled HAP). As a result, both sources are excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits for this location.
- 2a. The twenty-three storage tanks with capacity more than 10,000 gallons and constructed after July 23, 1984 are subject to New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels, 40 CFR 60, Subparts A and Kb. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
- b. The Permittee shall fulfill the monitoring of operations requirements of the New Source Performance Standards, 40 CFR 60.116b(a) and (b) for these tanks. That is, records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessels, shall be maintained and readily accessible for the life of the source.

- c. At all times the Permittee shall also maintain and operate the storage tanks, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions, pursuant to the NSPS, 40 CFR 60.11(d).
- 3a. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device (35 Ill. Adm. Code 218.122(b)).
- b. If no odor nuisance exists the limitations of Conditions 3(a) shall only apply to the loading of volatile organic liquids with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F) [35 Ill. Adm. Code 218.122(c)].
- 4. Plant operations and VOM emissions shall not exceed the following limits:
  - a. Storage and blending tanks operations:

Asphalt throughput 33,000,000 gallons/month, 132,000,000 gallons/year;

Asphalt emulsion throughput - 4,000,000 gallons/month and 12,000,000 gallons/year;

Cut back asphalt throughput 1,500,000 gallons/month, 6,000,000 gallons/year; and

VOM emissions - 4.0 tons/month, 15.0 tons/year.

VOM emissions from the storage and blending tanks operations shall be calculated monthly using equations given by AP-42 (5th edition, Section 7.1) and utilized in the USEPA distributed computer program TANKS and based on the actual tank monthly throughput and the maximum daily storage temperature recorded during each calendar month.
  - b. Tank truck loading operations:

Asphalt loading rate: 1,750,000 gallons/month, 14,000,000 gallons/year;

VOM emissions: 0.5 tons/month, 2.0 tons/year

VOM emissions from the truck loading lines shall be calculated using equations given by AP-42 (5th edition, Section 5.2) and based on the actual lines throughput and material temperature during the loading.

These limits are based on the maximum production rate and actual material temperature during material transfer. Compliance with annual limits shall be determined from a running total of 12 months of data.

5. The emissions of HAPs as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish by rule which would require the Permittee to obtain a Clean Air Act Permit Program permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a Clean Air Act Permit Program permit from the Illinois EPA.
6. This permit is issued based on negligible emissions of volatile organic materials from the asphalt additives storage tanks. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
7. This permit is issued based on negligible emissions of hydrogen chloride (HCl) from the hydrochloric acid storage and handling operations. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year. These limits are based on the annual hydrochloric acid usage being less than 5,000 gallons/year.
8. Operation and emissions of the four asphalt heaters (combined) shall not exceed the following limits:

Natural Gas Usage: 25 mmscf/month, 270 mmscf/year

| <u>Pollutant</u>                   | <u>Emission Factor</u><br><u>(Lb/mmscf)</u> | <u>Emissions</u> |                  |
|------------------------------------|---|------------------|------------------|
|                                    |   | <u>(Tons/Mo)</u> | <u>(Tons/Yr)</u> |
| Nitrogen Oxides (NO <sub>x</sub> ) | 100   | 1.3              | 13.5             |
| Carbon Monoxide (CO)               | 84  | 1.1              | 11.3             |
| Particulate Matter (PM)            | 7.6   | 0.1              | 1.0              |
| Volatile Organic Material (VOM)    | 5.5   | 0.07             | 0.7              |

These limits are based on the maximum heaters operations and standard emission factors given by AP-42. Compliance with annual limits shall be determined on a monthly basis from a running total of 12 months of data.

9. The Permittee shall maintain records of the following items:
  - a. For each storage/blending tank:
    - i. Names and identification number of materials transferred and/or stored;
    - ii. Material throughput (gallons/month);

- iii. Daily material temperature.
  - b. For each tank truck loading transfer:
    - i. Names and identification number of materials transferred;
    - ii. Material throughput (gallons);
    - iii. Material temperature during transfer.
  - c. Names and identification number of materials processed and/or stored and their throughput (gallons/month, gallons/year);
  - d. VOM and HAP emissions with supporting calculations (tons/month, tons/year);
  - e. Hydrochloric acid usage (gallons/month, gallons/year); and
  - f. Natural gas usage (mmscf/month, mmscf/year).
10. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA and USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to Illinois EPA request for records during the course of a source inspection.
11. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
12. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, IL 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

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Illinois Environmental Protection Agency  
Division of Air Pollution Control - Regional Office  
9511 West Harrison  
Des Plaines, Illinois 60016

If you have any questions on this permit, please call Valeriy Brodsky at 217/782-2113.

Donald E. Sutton, P.E.  
Manager of Permit Section  
Division of Air Pollution Control

DES:VJB:psj

cc: Illinois EPA, FOS Region 1  
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from the two asphalt storage and processing plants operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. This is a throughput of 150,000,000 gallons of asphalt products per year at this plant. The resulting maximum emissions are below the levels, e.g., 25 tons/year for VOM, 10 tons per year for a single HAP, and 25 tons per year for totaled HAP, at which this source would be considered a major source for purposes of Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

| <u>Emission Units</u>    | <u>VOM</u> | <u>NO<sub>x</sub></u> | <u>CO</u> | <u>PM</u> | <u>HCl</u> | <u>Single HAP</u> | <u>Total HAP</u> |
|--------------------------|------------|-----------------------|-----------|-----------|------------|-------------------|------------------|
| Storage and Blending     | 15.0       |                       |           |           |            |                   |                  |
| Truck Loading            | 2.0        |                       |           |           |            |                   |                  |
| Additives Storage        | 0.44       |                       |           |           |            |                   |                  |
| HCl Handling             | --         |                       |           |           | 0.44       |                   |                  |
| Asphalt Heaters          | 0.7        | 13.5                  | 11.3      | 1.0       |            |                   |                  |
| Korall Corporation Plant | 2.6        |                       |           |           |            |                   |                  |
| Both Plants Total        | 20.8       | 13.5                  | 11.3      | 1.0       | 0.44       | <10               | <25              |

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